

ASK Proxima C110 Projector

Frequently Asked Questions: Installation

Do I have to buy an ASK Proxima ceiling mount? I see that other companies offer mounts for less money. Can't I just build my own mount?

We strongly suggest that you use an ASK Proxima-approved ceiling mount with your projector. There are two basic reasons for this.

- First, our mounts are designed for a specific projector. They are built so they do not interfere with air circulation in and out of the projector. This is an important because when you install a projector on the ceiling, you are installing it in the warmest part of the room. Our mounts are made to bear the weight of the projector. We don't have any 'one-size-fits-all' mounts. We use heavy-gauge steel and sturdy fasteners.
- Second, should anything happen to your projector due to a non-approved ceiling mount, your warranty will not pay for the repair?

Can I mount this projector on the ceiling?

Yes. You use a ceiling mount kit, available from your ASK Proxima reseller (part number: SP-CEIL-011). You'll probably also want to run installation and video cables to the projector, as well as a power cable. Many of these items are also available from your ASK Proxima reseller. Most people arrange to have a professional installer mount the projector on the ceiling and run the cables.

What is the projection ratio (throw ratio) for this projector?

The horizontal throw ratio in the default 4:3 aspect ratio is 1.89 - 2.27. There are two ratios because the projector has a zoom lens. The two numbers represent the largest and smallest zoom settings.

The horizontal throw ratio is based on the width of the projected image. In the 16:9 aspect ratio, the width of the image remains the same as in 4:3. Thus, the throw ratio for 4:3 and 16:9 is the same.

For more information, see the next question, "How do I use the throw ratio to determine projection distance or image size?"

How do I use the throw ratio to determine throw distance or image size?

The horizontal throw ratio equals the throw distance divided by the image width. $TR = TD / W$. Let's say that you want to figure out how far back to place the X1 to achieve a 60" wide image. For the widest zoom setting, the formula would be, $1.89 = TD / 60"$, or $TD = 60" \times 1.89 = 113.4$ inches (about 9.5 feet).

For the widest zoom setting, the formula is $2.27 = TD / 60"$, or $TD = 2.27 \times 60 = 136.2$ inches (about 11.4 feet). In other words, you need to place the projector 9.5 to 11.4 feet from the screen to get a 60" wide image.

You can use the same formula to determine what size an image you get when you know what the throw distance is. In this case, W (image width) = TD (throw distance) / TR (throw ratio). Let's say that you know the projector will be located 12 feet from the screen. For the widest zoom setting, the formula is $W = 144" / 1.89 = 76.2$ inches. For the smallest zoom setting, the formula is $W = 144" / 2.27 = 63.4$ inches. Thus, if the projector is 12 feet (144") from the screen, the resulting image size will be 63.4" to 76.2" wide.

ASK Proxima has created a calculator that automatically provides you with throw distances and image sizes (including horizontal, diagonal and vertical sizes). Access the ASK Proxima Projection Calculator on the ASK Proxima website.

Can this projector be mounted on the wall?

Yes, the ceiling mount kit (SP-CEIL-011) allows you to install the projector on the wall opposite the projection screen. You must use height adjustable extension (SP-LTMT-EXT-P-S) with the ceiling mount.

The ceiling mount instructions are available on the C110's service webpage, located on askproxima.com.

Can the image be reversed and flipped?

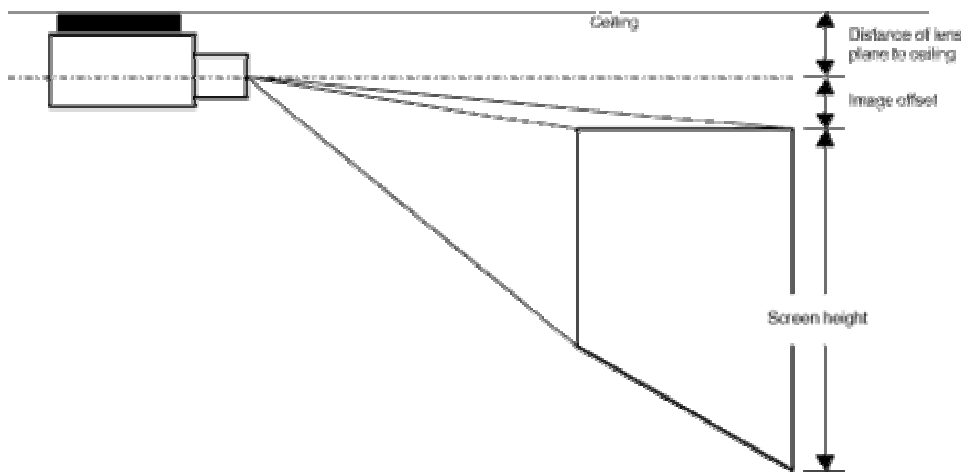
Yes. When you mount the projector on the ceiling, you must flip the image so it appears right side up on the screen. To flip the image, press the Menu button on the keypad. Go to Main > Settings > System. Select the Ceiling checkbox.

You can also reverse the image for installation in a rear projection system by activating the Rear Project option. In a rear projection system, the projector is mounted behind a piece of opaque or frosted glass. The image projects on the back of the glass. To reverse the image, press the Menu button on the keypad. Go to Main > Settings > System. Select Rear checkbox.

How far from the table top or the ceiling is the image cast by this projector? What is the image offset for this projector?

In 4:3 aspect ratio, the offset value is 112.2%. At a 16:9 aspect ratio, the offset value is 132.9%.

What is image offset? The 'image offset' percentage for a projector tells you where the image will appear in relation to the plane of the lens. An image offset of 0 means that half of the image is above the lens plane and half is below. An image offset of 100% means that all of the image is above the lens plane, with the bottom right at the lens plane. An offset value of more than 100% means that the image appears a distance above the lens plane, or below the lens plane if the projector is mounted on the ceiling (pictured below).



Why have image offset?—ASK Proxima adds image offset so the image can be projected at a good viewing level, and still maintain its rectangular shape. In other words, with image offset, you avoid keystone, where the image is larger on top than on the bottom.

This projector has two different offsets, depending on whether the aspect ratio is 16:9 or 4:3.

16:9 aspect ratio — At a 16:9 aspect ratio, the offset value is 132.9%. The top of the image is lower than when projected in 4:3 ratio—.125 of the 4:3 image height. This is because a 16:9 image that is the same width as a 4:3 image is also one-eighth smaller on the top and one-eighth smaller on the bottom.

4:3 aspect ratio — In 4:3 aspect ratio, the offset value is 112.2%. This means that the bottom of the image is 12.2% above the lens plane. In the diagram above, you can see that the image offset allows the screen to be mounted lower on the wall (note that the projector is upside down so the image appears to be below the lens plane).

Calculating image offset (16:9) — The image offset amount varies, depending on how far away the projector is from the wall and by how big the image is. To calculate the amount of offset, multiply the image height times .329. (Note: you can find the image height by using the ASK Proxima Projection Calculator). For a 50" tall image, the top of the image will be the distance between the ceiling and the lens plane plus 16.4".

Calculating image offset (4:3) — To calculate the amount of offset for a 4:3 aspect ratio image, multiply the image height times .122. (Note: you can find the image height by using the ASK Proxima Projection Calculator). For a 50" tall image, the top of the image will be the distance between the ceiling and the lens plane plus 6.1".

Note You can find the image height by using the ASK Proxima Projection Calculator.

What kind of screen should I use with this projector? Can I use a light colored wall?

First, for best results, we do not recommend casting images (especially video) on a light colored wall. While you will certainly get a viewable image, the color reproduction will not be accurate. Wall textures may also create image artifacts.

What screen you use depends on the viewing audience and the amount of light in the room (ambient light). Say the seating arrangement requires that you have a wide viewing angle and that the room has some ambient light. Choose a screen with a lower gain (for example, a DaLite HC-Da-Mat, a gray screen with 0.8 gain). If your viewing angle is narrower, you can choose a higher gain screen (for example the Stewart Grayhawk). Higher gain screens are also better for images larger than 100" wide. One issue to be aware of is that the higher the gain on a screen, the more likely you will notice "hot-spotting" and sparkles in the image. You should work with your screen supplier to make sure you get the appropriate screen for your circumstances. Find more information at DaLite Screen Company or Stewart Filmscreen Corporation.

Are there optional lenses available for this projector?

Currently, there are no optional lenses available.

Can I control this projector remotely via RS232 commands?

No. This projector cannot be controlled via RS232 commands.